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an aluminum nitride insulating film containing therein oxygen provided under said rear surface of the substrate; and

E1 Concl'd

a transistor provided over said front surface of the substrate, said transistor having at least a channel formation region comprising crystalline silicon, a gate insulating film adjacent to said channel formation region, and a gate electrode adjacent to said channel formation region with said gate insulating film interposed therebetween,

wherein said aluminum nitride insulating film has a thermal conductivity of 0.6 W/cmK or higher.

6. (Amended) A semiconductor device comprising:

a substrate having a front surface and a rear surface;

an aluminum nitride insulating film containing therein carbon provided under said rear surface of the substrate; and

fig. 2E

a transistor provided over said front surface of the substrate, said transistor having at least a channel formation region comprising crystalline silicon, a gate insulating film adjacent to said channel formation region, and a gate electrode adjacent to said channel formation region with said gate insulating film interposed therebetween.

E2

7. (Amended) A semiconductor device comprising:

a substrate having a front surface and a rear surface;

an insulating film comprising aluminum nitride and oxygen provided under said rear surface of the substrate; and

fig. 12E

a transistor provided over said front surface of the substrate, said transistor having at least a channel formation region comprising crystalline silicon, a gate insulating film adjacent to said channel formation region, and a gate electrode adjacent to said channel formation region with said gate insulating film interposed therebetween,

wherein said insulating film comprising aluminum nitride has a thermal conductivity of 0.6 W/cmK or higher.

8. (Amended) A semiconductor device comprising:

a substrate having a front surface and a rear surface;

an insulating film comprising aluminum nitride and carbon provided over said front surface of the substrate;

E2 Concl'd fig. 12E

a transistor provided over said insulating film, said transistor having at least a channel formation region comprising crystalline silicon, a gate insulating film adjacent to said channel formation region, and a gate electrode adjacent to said channel formation region with said gate insulating film interposed therebetween.

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19. (Amended) A semiconductor device comprising:

a substrate having a front surface and a rear surface;

an aluminum nitride insulating film containing therein carbon provided over said front surface of the substrate; and

fig. 12E

E3

a transistor provided over said aluminum nitride insulating film, said transistor having at least a channel formation region comprising crystalline silicon, a gate insulating film adjacent to said channel formation region, and a gate electrode adjacent to said channel formation region with said gate insulating film interposed therebetween.

20. (Amended) A semiconductor device comprising:

a substrate having a front surface and a rear surface;

an aluminum nitride insulating film containing therein carbon provided over said front surface of the substrate; and

fig. 12E

a transistor provided over said aluminum nitride insulating film, said transistor having at least a channel formation region comprising crystalline silicon, a gate insulating film adjacent to said channel formation region, and a gate electrode adjacent to said channel formation region with said gate insulating film interposed therebetween,

wherein said aluminum nitride insulating film has a thermal conductivity of 0.6 W/cmK or higher.

21. (Amended) An active matrix type display comprising:

fig. 12E

a substrate having a front surface and a rear surface;

an aluminum nitride insulating film containing therein carbon provided over said front surface of the substrate; and

a transistor provided over said aluminum nitride insulating film, said transistor having at least a channel formation region comprising crystalline silicon, a gate insulating film adjacent to said channel formation region, and a gate electrode adjacent to said channel formation region with said gate insulating film interposed therebetween.

22. (Amended) A semiconductor device comprising:

a substrate having a front surface and a rear surface;

an aluminum nitride insulating film containing therein at least oxygen provided under said rear surface of the substrate;

and

a transistor provided over said front surface of the substrate, said transistor having at least a channel formation region comprising crystalline silicon, a gate insulating film adjacent to said channel formation region, and a gate electrode adjacent to said channel formation region with said gate insulating film interposed therebetween,

wherein aluminum to nitrogen ratio in said aluminum nitride insulating film is in the range of 0.9 to 1.4.

23. (Amended) A semiconductor device comprising:

a substrate having a front surface and a rear surface;

an aluminum nitride insulating film containing therein carbon provided under said rear surface of the substrate; and

a transistor provided over said front surface of the substrate, said transistor having at least a channel formation region comprising crystalline silicon, a gate insulating film adjacent to said channel formation region, and a gate electrode adjacent to said channel formation region with said gate insulating film interposed therebetween,

wherein aluminum to nitrogen ratio in said aluminum nitride insulating film is in the range of 0.9 to 1.4.

24. (Amended) A semiconductor device comprising:

a substrate having a front surface and a rear surface;

an aluminum nitride insulating film containing therein carbon provided over said front surface of the substrate; and

a transistor provided over said aluminum nitride insulating film, said transistor having at least a channel formation region comprising crystalline silicon, a gate insulating film adjacent to said channel formation region, and a gate electrode adjacent to said channel formation region with said gate insulating film interposed therebetween,

wherein aluminum to nitrogen ratio in said aluminum nitride insulating film is in the range of 0.9 to 1.4.

32. (Amended) The device of claim 3 wherein said aluminum nitride insulating film has a thickness of 100 Å to 5000 Å.

33. (Amended) [The display] of claim 6 wherein said aluminum nitride insulating film has a thickness of 100 Å to 5000 Å.

34. (Amended) [The display] of claim 7 wherein said insulating film comprising aluminum nitride has a thickness of 100 Å to 5000 Å.

35. (Amended) [The display] of claim 8 wherein [said aluminum nitride layer] has a thickness of 100 Å to 5000 Å.

37. (Amended) The device of claim 19 wherein said aluminum nitride insulating film has a thickness of 100 Å to 5000 Å.

38. (Amended) The device of claim 20 wherein said aluminum nitride insulating film has a thickness of 100 Å to 5000 Å.

39. (Amended) [The device] of claim 21 wherein said aluminum nitride insulating film

~~has a thickness of 100 Å to 5000 Å.~~

40. (Amended) The device of claim 22 wherein said aluminum nitride insulating film has a thickness of 100 Å to 5000 Å.

41. (Amended) The device of claim 23 wherein said aluminum nitride insulating film has a thickness of 100 Å to 5000 Å.

42. (Amended) The device of claim 24 wherein said aluminum nitride insulating film has a thickness of 100 Å to 5000 Å.

43. (Amended) The device of claim 2 wherein said channel formation region is crystallized by laser irradiation through [an insulating film] on said channel formation region.

44. (Amended) The device of claim 3 wherein said channel formation region is crystallized by laser irradiation through [an insulating film] on said channel formation region.

45. (Amended) The device of claim 6 wherein said channel formation region is crystallized by laser irradiation through [an insulating film] on said channel formation region.

46. (Amended) The device of claim 7 wherein said channel formation region is crystallized by laser irradiation through [an insulating film] on said channel formation region.

47. (Amended) The device of claim 8 wherein said channel formation region is crystallized by laser irradiation through [an insulating film] on said channel formation region.

48. (Amended) The device of claim 19 wherein said channel formation region is crystallized by laser irradiation through [an insulating film] on said channel formation region.

49. (Amended) The device of claim 20 wherein said channel formation region is

crystallized by laser irradiation through [an insulating film] on said channel formation region.

50. (Amended) The device of claim 21 wherein said channel formation region is crystallized by laser irradiation through [an insulating film] on said channel formation region.

51. (Amended) The device of claim 22 wherein said channel formation region is crystallized by laser irradiation through [an insulating film] on said channel formation region.

52. (Amended) The device of claim 23 wherein said channel formation region is crystallized by laser irradiation through [an insulating film] on said channel formation region.

53. (Amended) The device of claim 24 wherein said channel formation region is crystallized by laser irradiation through [an insulating film] on said channel formation region.

54. (Amended) A semiconductor device comprising:

a substrate having a front surface and a rear surface;

an aluminum nitride insulating film containing therein oxygen provided under said rear surface of the substrate; and

a transistor provided over said front surface of the substrate, said transistor having at least a channel formation region comprising crystalline silicon, a gate insulating film adjacent to said channel formation region, and a gate electrode adjacent to said channel formation region with said gate insulating film interposed therebetween;

an interlayer insulating film having a leveled upper surface over said transistor; and

a pixel electrode over said interlayer insulating film.

55. (Amended) The device of claim 54 wherein said channel formation region is crystallized by laser irradiation through [an insulating film] on said channel formation region.

57. (Amended) A semiconductor device comprising:

a substrate having a front surface and a rear surface;

an aluminum nitride insulating film containing therein carbon provided over said front surface of the substrate;

a transistor provided over said aluminum nitride insulating film, said transistor having at least a channel formation region comprising crystalline silicon, a gate insulating film adjacent to said channel formation region, and a gate electrode adjacent to said channel formation region with said gate insulating film interposed therebetween;

an interlayer insulating film having a leveled upper surface over said transistor; and

a pixel electrode over said interlayer insulating film.

58. (Amended) The device of claim 57 wherein said channel formation region is crystallized by laser irradiation through an insulating film on said channel formation region.

Please add new claims 60-67 as follows:

--60. A semiconductor device comprising:

a substrate comprising a front surface and a rear surface;

an insulating film comprising aluminum nitride and oxygen provided over said front surface of the substrate;

a transistor provided over said insulating film, said transistor having at least a channel formation region, a gate insulating film adjacent to said channel formation region, and a gate electrode adjacent to said channel formation region with said gate insulating film interposed therebetween;

an interlayer insulating film comprising a leveled upper surface over said transistor; and

a pixel electrode over said interlayer insulating film.

61. A semiconductor device comprising:

a substrate comprising a front surface and a rear surface;

an insulating film comprising aluminum nitride and oxygen provided over said